## § 971.604

- (h) If test mining is proposed, the applicant shall include in the monitoring plan a monitoring plan for the test(s) as well as a strategy for using the result to monitor more effectively commercial-scale recovery. This monitoring shall address concerns expressed in the PEIS and in the permit EIS.
- (i) The monitoring plan shall include a sampling strategy that assures: that it is based on sound statistical methods, that equipment and methods be scientifically accepted, that the personnel who are planning, collecting and analyzing data be scientifically well qualified, and that the resultant data be submitted to the Administrator in accordance with formats of the National Oceanographic Data Center and other formats as may be specified by the Administrator.
- (j) Pursuant to section 114(1) of the Act, the Administrator intends to place observers onboard mining vessels, not only to ensure that permit TCRs are followed, but also to evaluate the effectiveness of monitoring strategies, both in terms of protecting the environment and in being cost-effective (See §971.1005), and if necessary, to develop potential mitigation measures. If modification of permit TCRs or regulations is required to protect the quality of the environment, the Administrator may modify TCRs pursuant to §971.414, or the regulations pursuant to §971.804.

## § 971.604 Best available technologies (BAT) and mitigation.

(a) The Administrator shall require in all activities under new permits, and wherever practicable in activities under existing permits, the use of the best available technologies for the protection of safety, health, and the environment wherever such activities would have a significant adverse effect on safety, health, or the environment, except where the Administrator determines that the incremental benefits are clearly insufficient to justify the incremental costs of using such technologies. Because of the embryonic nature of the industry, NOAA is unable either to specify particular equipment or procedures comprising BAT or to define performance standards. Until such experience exists, the applicant shall submit such information as is necessary to indicate, as required above, the use of BAT, the alternatives considered to the specific equipment or procedures proposed, and the rationale as to why one alternative technology was selected in place of another. This analysis shall include a discussion of the relative costs and benefits of the technologies considered.

- (b) NOAA is not specifying particular mitigation methodologies or techniques at this time (such as requiring the sub-surface release of mining vessel discharges), but expects applicants and permittees to develop and carry out their operations, to the extent possible, to minimize adverse environmental effects and to be able to demonstrate efforts to that end. The applicant must submit a plan describing how he would mitigate a problem, if it were caused by the surface release of mining vessel discharges, including a plan for the monitoring of any discharges. Based upon monitoring results, NOAA may find it necessary in the future to specify particular procedures for minimizing adverse environmental effects. These procedures would be incorporated into permit TCRs.
- (c) NOAA will require the permittee to report, prior to implementation, any proposed technological or operational changes that will increase or have unknown environmental effects. Changes in composition, concentration or size distribution of suspended particulates discharged from the mining vessel, water depth of vessel discharges, depth of cut in the seafloor of the mining collector, and direction or amount of sediment discharged at the seafloor are factors of concern to NOAA. In reporting any such change, the permittee shall submit information to indicate the use of BAT, alternatives considered, and rationale for selecting one technology in place of another, in a manner comparable to and to the extent required in paragraph (a) of this section. If proposed changes have a high potential for increasing adverse environmental effects, the Administrator may disapprove or require modification of the changes.